

REMARKS

1. In response to the Final Office Action mailed October 9, 2007, Applicants respectfully request reconsideration. Claims 20-38 were last presented in the application. In the outstanding Office Action, claims 20-38 were rejected. By the foregoing Amendments, ten claims (claims 20, 23, 24, 25, 27, 29, 31, 32, 36, and 38) have been amended. Claims 21, 26, 28 and 35 have been cancelled, and no new claims have been added. Upon entry of this paper, claims 20, 22-25, 27, 29-34, and 36-38 will be pending in this application. Of these 15 claims, 3 claims (claims 20, 25 and 32) are independent.
2. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

3. Applicants acknowledge receipt of form PTO-892 listing additional references identified by the Examiner.

Claim Rejections Under 35 USC § 102

4. The Examiner has rejected claims 20-38 as being anticipated by U.S. Patent No. 5,999,856 to Kennedy (hereafter “Kennedy”). Applicants respectfully disagree.
5. As amended above, independent claim 20 recites:

“An evoked neural response measuring device comprising: a ***first implantable subsystem*** comprising a ***high gain amplifier*** having a reference voltage input and a signal input, and an ***electrode array configured to provide stimulation*** to the auditory nerve ***and further configured to successively detect*** discrete values corresponding to an evoked neural response from the auditory nerve to said stimulation; and a second subsystem configured to reconstruct said plurality of discrete values into a continuous waveform, wherein said first implanted subsystem is configured to set said reference voltage to a first of said detected discrete values at a first time and further configured to set said signal input to a second of said detected discrete values at a second time, wherein said amplifier is configured to ***amplify the difference between the first and second*** discrete values thereby obtaining a plurality of discrete values collectively representing an unsaturated, high gain amplified version of the evoked neural response of the auditory nerve.”

(See, Applicants' amended independent claim 20; emphasis added.)

6. Kennedy describes a hearing assistance system having electric response audiometry functions for diagnostic, self-calibration, frequency-response parameter adjustment, feedback self-testing and automatic gain control purposes. (See, Kennedy, Abstract.) Kennedy describes an input transducer (e.g., microphone) for receiving sound waves in the middle ear 35 region, and an output stimulator 215 which produces mechanical vibrations that are coupled to stapes 50 or other suitable auditory element in order to assist hearing. (See, Kennedy, col. 6, ll. 52-61.) A "response sensor" that is separate from stimulator 215 such as EEG device 300 or sensor 405 is described in Kennedy as being used to receive auditory response signals. Clearly Kennedy, with its two separate structures for providing stimulating (stimulator 215) and for receiving response signals (EEG device 300 or sensor 405), does not teach or suggestion a single component, namely the electrode array, which is "**configured to provide stimulation to the auditory nerve and further configured to successively detect** discrete values corresponding to an evoked neural response" as recited in Applicants' independent claim 20. (See, Applicants' amended independent claim 20; emphasis added.)

7. Furthermore, although Kennedy describes in column 7, lines 38-39 "EEG device 300 typically includes a differential amplifier for amplification of the received brain waves", nowhere does Kennedy teach or suggest a "first implanted subsystem is **configured to set said reference voltage to a first** of said detected discrete values at a first time **and further configured to set said signal input to a second** of said detected discrete values at a second time, wherein said amplifier is **configured to amplify the difference between the first and second** discrete values" as further recited in Applicants' independent claim 20. (See, Applicants' amended independent claim 20; emphasis added.) Therefore, as Kennedy fails to teach or suggest all elements of the invention as claimed by Applicants, the rejection of independent claim 20, as amended, is now improper and should be reconsidered and withdrawn.

8. Independent claims 25 and 32 are also patentable over Kennedy for reasons similar to those above for independent claim 20. For at least the reasons stated above, independent claims 20, 25 and 32 are patentable over Kennedy and other art of record. Accordingly, Applicants respectfully request that the rejections of these claims be reconsidered and withdrawn.

9. Furthermore, Applicants' independent claims 20, 25 and 32 are patentable over U.S. Patent No. 6,151,400 to Seligman ("Seligman") because, *inter alia*, Seligman fails to teach or suggest "an ***electrode array configured to provide stimulation*** to the auditory nerve ***and further configured to successively detect*** discrete values corresponding to an evoked neural response from the auditory nerve to said stimulation" as recited by Applicants' independent claim 20. (See, Applicants' independent claim 20, as amended, above; emphasis added) For similar reasons, claims 25 and 32 are patentable over Seligman. As acknowledged by the Examiner in the previous Office Action of September 25, 2006, Seligman is said to describe a sensor 10. Applicants note that component 10 of Seligman is described as a microphone 10. (See, Seligman, col. 2, ln. 41.) No where does Seligman teach or suggest having "an ***electrode array configured to provide stimulation*** to the auditory nerve ***and further configured to successively detect*** discrete values corresponding to an evoked neural response from the auditory nerve to said stimulation" as recited by Applicants' independent claim 20. Accordingly, Applicants' independent claims 20, 25 and 32, as presently amended above, are patentable over Seligman.

Dependent Claims

10. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, Applicants respectfully assert that the dependent claims are also allowable over the art of record.

Conclusion

11. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

12. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application, cancellations and amendments of above claims, therefore, are not to be construed as an admission regarding the patentability of any claims, and Applicants reserve the right to pursue such claims in a continuation or divisional application.

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Respectfully submitted,

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